MATERIAL SAFETY DATA SHEET

SECTION I - COMPANY AND PRODUCT INFORMATION Product SKU Number:
Emergency Telephone No.: (909) 390-9912
NFPA Rating: Health:3 Flammability:0 Reactivity:0 Special: ACID
DOT Proper Shipping Name: Hydrochloric acid, solution DOT ID Number: UN1789 DOT Hazard Class: 8, CORROSIVE Package Group: II
SECTION II - HAZARDOUS INGREDIENTS HYDROCHLORIC ACID
SECTION III - PHYSICAL DATA
FREEZING POINT
SPECIFIC GRAVITY (H ₂ O)=1) 1.16 pH (in 1% solution) N/A
VAPOR PRESSURE (cm Hg.) 25 mm 11g. PERCENT VOLATILE BY VOLUME N/AMOLECULAR WEIGHT 36.461 EVAPORATION RATE (=1) N/AAPPEARANCE Greenish-yellow VAPOR DENSITY (Air = 1) 11.0ODOR A pungent odor
SECTION IV - FIRE AND EXPLOSION HAZARD DATA
FLASH POINT
EXTINGUISHING MEDIA Non-Flammable SPECIAL FIRE FIGHTING PROCEDURES:
Wear positive pressure self-contained breathing apparatus. UNUSUAL FIRE AND EXPLOSION HAZARDS:
Hydrochloric acid is non-flammable. Acid action on most metals may
release Hydrogen, a highly flammable and explosive GaS.
SECTION V - HEALTH HAZARD DATA THRESHOLD LIMIT VALUE:
EFFECTS OF OVEREXPOSURE: EYE- severe irritation with corneal injury which may result in blindness. SKIN - severe irritation. INGESTION - may cause gastrointestinal irritation or ulceration and severe burns of the mouth and throat. INHALATION - severe irritation. EMERGENCY AND FIRST AID PROCEDURES:
EYES: Wash with water for 15 minutes and get medical attention promptly. INGESTION: Do not induce vomiting; give large amounts of water. Follow with milk of magnesia, beaten eggs, or vegetable oil. Call physician immediately. INHALATION: remove to fresh air

... if effects occur. SKIN: Flush with water for 15 minutes.

SECTION VI - REACTIVITY DATA

STABILITY: This Product is stable

CONDITIONS TO AVOID:

- ... Contact with metals may cause generation of flammable
- ... concentrations of hydrogen gas.

INCOMPATIBILITY: (Materials to avoid)

... Avoid basic and corrosive materials. Avoid contact with most

... metals. Avoid oxidizing materials (can oxidize to chlorine).

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION:..... WILL NOT OCCUR CONDITIONS TO AVOID None Known

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF MATERIAL RELEASED OR SPILLED:

- ... Small quantities may be flushed with copious quantities of water;
- ... in case of larger amounts, contain liquid. Use limestone, lime or
- ... soda ash to cautiously neutralize. Since considerable amounts of
- ... heat and steam may be generated during neutralization.

WASTE DISPOSAL METHOD:

... Comply with all local, state, and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: (Specify type)

- ... Where required to maintain exposure levels before exposure limits
- ... use a NIOSH approved respirator for hydrogen chloride gas, or
- ... hydrogen chloride mists as applicable.

VENTILATION:

LOCAL EXHAUST: If possible... MECHANICAL: If possible to provide

PROTECTIVE GLOVES: Rubber Gloves
EYE PROTECTION: Use chemical goggles

OTHER PROTECTIVE EQUIPMENT:

- ... Chemical splash goggles and face shield as a minimum. Acid
- ... resistant apron.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

- ... Prevent all contact with eyes and skin. Avoid breathing
- ... irritating vapors.

OTHER PRECAUTIONS: None Known

This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.